

a² condition for landing, and a generally horizontal condition for stowage e.g. within a wing of the aircraft.

Page 1, after first full paragraph, please add a new centered heading as follows:

Background of the Invention

Page 1, after third full paragraph, please add a new centered heading as follows:

Summary of the Invention

a⁴ At page 1, please delete the entire fourth paragraph, with carryover to page 2, and substitute with the following:

a⁵ According to one aspect of the invention we provide a hydraulic system for raising and lowering aircraft landing gear, the system including an actuator which is extendible and retractable to operate the landing gear, the actuator including a movable member in a casing, the movable member being moved relative to the casing in a first direction to extend the actuator when fluid under pressure is supplied to a first side of the movable member while fluid is exhausted from a second side of the movable member, and the movable member being moved in a second direction to retract the actuator when fluid under pressure is supplied to the second side of the movable member while fluid is exhausted from the first side of the movable member, and there being selector valve means selectively to supply pressurized fluid to the first or second side of the movable member, and means provided to permit exhausted fluid from at least one of the first and second sides of the movable member to augment the supplied fluid from the selector valve means and thus be directed with the supplied fluid, to the second or first side respectively of the movable member.

At page 3, please delete the third full paragraph, and substitute with the following:

a⁶ The selector valve means may be movable to a first position to permit the flow of fluid therethrough from a source of pressurized fluid to the first side of the movable member,

and to a second position to permit the flow of fluid therethrough from the source to the second side of the movable member, and to a rest position in which the source is isolated and fluid may pass from the system to tank.

At page 4, after second full paragraph, please insert a new centered heading as follows:

Brief Description of the Drawings

At page 5, after description of FIGURE 3, please insert a new centered heading as follows:

Detailed Description of the Invention

Page 5, please delete fourth full paragraph, and substitute with the following:

The landing gears 11, 12 are operable by means of respective actuators 18 which are extendible and retractable by means of pressurized hydraulic fluid.

Page 5, please delete sixth full paragraph, and substitute with the following:

When pressurized hydraulic fluid is supplied to a head end 11 of the actuator 18 at a first side of the piston 19, the piston 19 moves in the cylinder 20 so as to extend the actuator 18, at the same time forcing fluid at a second opposite side of the piston 19, to be exhausted from an actuator rod end 23 of the actuator 18. Conversely, when pressurized fluid is supplied to the actuator rod end 23 of the actuator 18, the piston 19 moves in the cylinder 20 so as to retract the actuator 18, at the same time forcing fluid to be exhausted from the head end 22.

Page 6, please delete the first full paragraph, and substitute with the following:

The selector valve means 25 is movable between three positions in this example.

When in a first raised position, i.e. when a spool 29 thereof is in the position indicated in the drawings at I, pressurized fluid is supplied to a first supply line 30 which extends to the head

a¹¹ end 22 of the actuator 18. In the first supply line 30 there is a flow regulating means 31 which controls the pressure of fluid which is supplied to the head end 22 of the actuator 18. Also there is a by-pass one way valve 32 which enables fluid from the first supply line 30 to flow freely to tank 27 as hereinafter described.

Page 6, please delete the second full paragraph, and substitute with the following:

a¹² When the spool 29 of the selector valve means 25 is in an intermediate or rest position as shown and indicated at R, the pressurized fluid source i.e. pump 26 is isolated from the actuator 18 and moreover fluid may flow from the first supply line 30 as well as from a second supply line 34 to be described, back to tank 27.

Page 6, please delete the third full paragraph, and substitute with the following:

a¹³ When the spool 29 of the selector valve means 25 is in a second lowered position as indicated at II in figure 2, pressurized fluid is fed from the pump 26 to a second supply 34 which extends to the rod end 23 of the actuator 18. The second supply line 34 includes a one way valve 35 through which pressurized fluid may freely flow to the rod end 23 of the actuator 18, and a by-pass restrictor 36 which allows fluid to by-pass the one way valve 35 as hereinafter described.

Page 7, please delete the fifth full paragraph, and substitute with the following:

a¹⁴ Typically, a mechanical or other sensing arrangement is provided which may interface with an interlock which operates mechanically to retain the landing gear in its fully lowered condition and may cause the selector valve means 25 to assume the rest position R once the landing gear 11 or 12 is fully lowered. In the rest condition R, fluid may flow from the first and second supply lines 30, 34 to tank 27 so that the system is unpressurized when the landing gear 11 or 12 is in a fully lowered condition and the pump 26 is indicated.

Page 8, please delete the first full paragraph, and substitute with the following:

a¹⁵ When it is desired to raise the landing gear 11 or 12 the selector valve means 25 may be moved to the second position II in which pressurized fluid is fed to the second supply line 34 through the one way valve 35 to the rod end 23 of the actuator 28, and the piston 19 will be moved to begin retraction of the landing gear 11 or 12. When there is an interlock mechanically to retain the landing gear in a lowered condition, this needs to be released before the piston 19 can move. Such release may be arranged to occur simultaneously with selector valve means 25 movement.

Page 8, please delete the third full paragraph, and substitute with the following:

a¹⁶ As the landing gear 11 or 12 fully retracts, an uplock may be operated mechanically to hold the landing gear in its raised condition. At the same time, the selector valve means 25 may be moved to the rest position R so that again, the hydraulic system is unpressurized when the landing gear 11 or 12 is in its stowed condition.

At page 10, please delete the last paragraph with carryover to page 11, and substitute with the following:

a¹⁷ The features disclosed in the foregoing description, or the following claims, or the accompanying drawings, expressed in their specific forms or in terms of a means for performing the disclosed function, or a method or process for attaining the disclosed result, as appropriate, may, separately, or in any combination be utilized for realizing the invention in diverse forms thereof.

IN THE CLAIMS:

Please delete Claims at top of page.

At line 1, before claim 1, please insert We Claim.

a¹⁸ 1 (Amended). A hydraulic system for raising and lowering aircraft landing gear, the system including an actuator which is extendible and retractable to operate the landing gear,